STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 132530

TO: Kevin Weddington
Location: REM/3A65/3C70
Art Unit: 1614
Thursday, September 16, 2004

Case Serial Number: 10/748495

From: Edward Hart
Location: Biotech-Chem Library
REM-1A55
Phone: 571-272-2512

edward.hart@uspto.gov

Search Notes

Examiner Weddington,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

Edward Hart

REM 3A65

Access DB# 132538

132530

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: K. Weddington Examiner #: 68082 Date: 9-14-04

Art Unit: 1614 Phone Number 30 272-0587 Serial Number: 10/748,495

Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

A method for treating a cardiac disorder with a seven-carbon fatty acid

The cardiac disorder is cardiac muscle weakness or cardiac myopathy

Kevin
Not much here - to give you. If you would like to see the ~75 Ref. on seven carbon fatty acids please let me know
Edward.

****

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: _____	NA Sequence (#)_____	STN _____	
Searcher Phone #: _____	AA Sequence (#)_____	Dialog _____	
Searcher Location: _____	Structure (#) _____	Questel/Orbit: _____	
Date Searcher Picked Up: _____	Bibliographic _____	Dr Link _____	
Date Completed: _____	Litigation _____	Lexis/Nexis_____	
Searcher Prep & Review Time _____	Fulltext _____	Sequence Systems _____	
Clerical Prep Time _____	Patent Family _____	WWW/Internet _____	
Online Time: _____	Other _____	Other (specify)_____	

PTO-1590 (1-2000)

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=> file hcaplus
FILE 'HCAPLUS' ENTERED AT 12:06:59 ON 16 SEP 2004
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FILE COVERS 1907 - 16 Sep 2004  VOL 141 ISS 12
FILE LAST UPDATED: 15 Sep 2004  (20040915/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


=> d his

     (FILE 'HOME' ENTERED AT 11:40:04 ON 16 SEP 2004)

     FILE 'HCAPLUS' ENTERED AT 11:40:22 ON 16 SEP 2004
               SET COST OFF
               E ROE CHARLES/AU,IN
L1            68 S E3,E10-E11
L2            75 S SEVEN (L) CARBON (L) FATTY (L) ACID
L3             1 S L1 AND L2
L4             1 S L2 AND CARDIO?
L5        308102 S FATTY (L) ACID
L6          2659 S L5 AND CARDIAC?
L7           636 S L6 AND (MUSCLE OR MYOPATHY)
L8             3 S L7 AND (MUSCLE (L) WEAKNESS)
L9             0 S L2 AND CARDIAC? (L) DISORDER
L10            0 S L2 AND MYOPATHY
               E FATTY ACID
L11       308102 S FATTY (L) ACID
L12          106 S L11 AND CARDIAC? (L) DISORDER
L13            1 S SEVEN (2W) CARBON (2W) FATTY (2W) ACID
L14            1 S 7 (2W) CARBON (2W) FATTY (2W) ACID
L15            0 S 7 (1W) CARBON (2W) FATTY (2W) ACID
L16        11083 S CARDIAC? AND DISORDER?
L17            0 S L16 AND 7 (1W) CARBON (2W) FATTY (2W) ACID
L18            0 S L16 AND 7 (2W) CARBON (2W) FATTY (2W) ACID
L19           99 S L16 AND  MYOPATHY?
L20            0 S L19 AND 7 (2W) CARBON (2W) FATTY (2W) ACID

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=> d ibib abs hitrn l3 tot

L3   ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2000:553360  HCAPLUS
DOCUMENT NUMBER:          133:119397
TITLE:                    Nutritional supplement or pharmaceutical preparation
```

comprising triglycerides with **seven-carbon fatty acids**

INVENTOR(S): **Roe, Charles R.**
PATENT ASSIGNEE(S): Baylor University Medical Center, USA
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000045649	A1	20000810	WO 2000-US3022	20000203
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2361070	AA	20000810	CA 2000-2361070	20000203
EP 1150579	A1	20011107	EP 2000-910086	20000203
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002536304	T2	20021029	JP 2000-596781	20000203
NZ 513329	A	20031128	NZ 2000-513329	20000203
AU 775708	B2	20040812	AU 2000-32236	20000203
US 6740679	B1	20040525	US 2001-890559	20010801
US 2003125386	A1	20030703	US 2003-371385	20030221
US 2003162833	A1	20030828	US 2003-371685	20030221
US 2004152773	A1	20040805	US 2003-748432	20031230
US 2004152776	A1	20040805	US 2003-748495	20031230

PRIORITY APPLN. INFO.:	US 1999-119038P	P 19990205
	WO 2000-US3022	W 20000203
	US 2001-890559	A3 20010801
	US 2003-371385	A3 20030221
	US 2003-371685	A3 20030221

AB A **seven-carbon fatty acid,** preferably n-heptanoic **acid,** has been identified as an excellent energy source for patients suffering from inherited metabolic disorders or acquired metabolic derangements, especially defects in long-chain **fatty acid** metabolism A **seven-carbon fatty acid** can also be provided in a nutritional supplement for patients who need an increase in the energy production derived from **fatty acid** metabolism

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitrn l14 tot

L14 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1946:34072 HCAPLUS
DOCUMENT NUMBER: 40:34072
ORIGINAL REFERENCE NO.: 40:6611h-i,6612a-b
TITLE: Quantitative study of the products of fatty acid oxidation in liver suspensions
AUTHOR(S): Lehninger, Albert L.

CORPORATE SOURCE: Univ. of Wisconsin, Madison
SOURCE: Journal of Biological Chemistry (1946), 164, 291-306
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. C.A. 40, 4092.3. Washed rat liver enzyme suspension, in the presence of adenosine triphosphate, magnesium ions, and malonate, oxidizes octanoate completely to acetoacetate according to the equation $C_7H_{15}COOH + 3O_2 \rightarrow 2CH_3COCH_2COOH + 2H_2O$. There is no endogenous oxidative activity. In the presence of ATP, magnesium ions, and malonate, and in the absence of oxalacetate, the enzyme suspension oxidizes pyruvate quantitatively to acetoacetate according to the equation $2CH_3COCOOH + O_2 \rightarrow CH_3COCH_2COOH + 2CO_2 + H_2O$. In the presence of oxalacetate, however, the yield of acetoacetate is diminished and extra citrate accumulates, evidence of the occurrence of the "Krebs condensation." When fatty acids are oxidized by the enzyme suspension in the presence of fumarate and malonate, the yield of acetoacetate is diminished and extra citrate, α-ketoglutarate, and succinate accumulate in such amts. as to account quantitatively for the C of the fatty acid diverted from acetoacetate production. Acetoacetate does not form citrate in the presence of oxalacetate and ATP; this indicates that the formation of citrate from fatty acids involves some precursor of acetoacetate. 7 and 9-**Carbon fatty acids** are oxidized and form acetoacetate and citrate at approx. the same rates as octanoate.